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RESEARCH

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SKIN COLOR AND HEALTH CARE IN THE PANDEMIC: POPULATION SURVEY WITH WOMEN IN BAGÉ-RS

Cor da pele e a assistência em saúde na pandemia: inquérito populacional com mulheres em BAGÉ-RS
Color de la piel y atención sanitaria em la pandemia: encuesta de población com mujeres em BAGÉ-RS

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ABSTRACT

Objective: identify the behavior of the demand for services of the unified health system during the COVID-19 pandemic, based on the racial profile of women in Bagé. **Method:** cross-sectional, population-based study with four serial surveys fortnightly, in which a representative sample of individuals in the city of Bagé was interviewed. Held from April to June 2020. **Results:** There were 984 female interviewees. It has been shown that skin color can determine the health profile. As for the search for a health service in the two weeks prior to the interview, brown women differ from white women, with a higher demand for health care. Primary care units represented the most prevalent health service in all skin color groups. **Conclusion:** In the context studied, primary care services were available and were used by a group that often encounters barriers to access to health.

DESCRIPTORS: Women; Health services; Socioeconomic factors.

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RESUMO

Objetivo: identificar o comportamento da demanda por serviços do sistema único de saúde durante a pandemia da COVID-19, a partir do perfil racial de mulheres em Bagé. **Método:** estudo transversal, de base populacional com quatro inquéritos seriados quinzenalmente, a qual foi entrevistada uma amostra representativa dos indivíduos da cidade de Bagé. Realizado de abril a junho de 2020. **Resultados:** foram 984 entrevistadas do sexo feminino. Evidenciou-se que a cor da pele pode determinar o perfil de saúde. Quanto a busca por um serviço de saúde nas duas semanas anteriores à entrevista as pardas se diferem das brancas, tendo maior procura por assistência em saúde. As unidades de atenção básica representaram o serviço de saúde mais prevalente em todos os grupos de cor da pele. **Conclusão:** no contexto estudado os serviços de atenção primária estavam disponíveis e foram utilizados por um grupo que frequentemente encontra barreiras no acesso à saúde.

DESCRITORES: Mulheres; Serviços de saúde; Fatores socioeconômicos.

RESUMEN

Objetivo: identificar el comportamiento de la demanda de servicios del sistema de salud unificado durante la pandemia de COVID-19, basándose en el perfil racial de las mujeres en Bagé. **Método:** estudio transversal basado en la población con cuatro encuestas seriadas quincenales, en las que se entrevistó a una muestra representativa de personas en la ciudad de Bagé. Celebrado de abril a junio de 2020. **Resultados:** hubo 984 mujeres entrevistadas. Se ha demostrado que el color de la piel puede determinar el perfil de salud. En cuanto a la búsqueda de un servicio de salud en las dos semanas anteriores a la entrevista, las mujeres morenas difieren de las mujeres blancas, con una mayor demanda de atención médica. Las unidades de atención primaria representaban el servicio de salud más frecuente en todos los grupos de color de piel. **Conclusión:** en el contexto estudiado, los servicios de atención primaria estaban disponibles y fueron utilizados por un grupo que a menudo encuentra barreras para acceder a la salud.

DESCRIPTORES: Mujeres; Servicios de salud; Factores socioeconómicos.

INTRODUCTION

Knowledge about health inequalities allows establishing mechanisms related to the health and disease process, which corroborates the planning of health promotion and prevention, overcoming prejudices and taboos by identifying opportunities for preventive interventions with high potential effectiveness.¹

Inequality is usually seen only as an unbalanced distribution of wealth or income, however, it is a more complex phenomenon, reinforced by various forms of disparity, including gender and ethnicity. Inequality is multifaceted, with each face constituting a symptom, and may be the cause of another inequality affecting the quality of life of individuals.²

When health disparities between racial, social, and gender groups are analyzed, the principles advocated by the Brazilian Federal Constitution can be identified.³ In recent years, an increase in inequality indicators has been identified, especially affecting the black population.⁴

According to an African study, it is evident that most people who depend on public health services suffer from the lack of quality of this service, which is totally influenced by the social and racial status of individuals who seek this service, making evident the discrepancy of care for black and poor women.⁵

Therefore, it is reinforced that the perceived difficulty in accessing health services was greater among blacks than whites throughout the observation period and in all Brazilian geographic regions. This subjective indicator of access to health care may not be grounded in lived experiences within the health care system, but it certainly can affect health care-seeking behaviors and overall satisfaction with care, which will influence future

experiences with service delivery. More importantly, racial inequalities in perceived difficulty in accessing health services cannot be explained by factors other than social processes that unfairly distribute resources, expectations, and experiences between racially dominant and minority groups in Brazil.⁶

In the current context, the pandemic of COVID-19 in Brazil demonstrates that certain regions and populations are placed in conditions of greater vulnerability to the risks of contamination and death. This scenario is contextualized since a 63-year-old woman, who worked as a housemaid, was the first confirmed victim of the coronavirus in Rio de Janeiro.⁷ She had contact with her employer who tested positive for Covid-19 and had traveled to Italy.⁷ This fact elucidates and marks the social differences in the fight against COVID-19.

Given the above, this study aims to identify the behavior of the demand for SUS services during the COVID-19 pandemic, according to the racial profile of women in Bagé/RS. This study highlights important characteristics of the population in need of attention from health services in the fight against the pandemic

METHOD

The study took place between April and June 2020. This is a population-based cross-sectional study with four surveys serialized every two weeks, in which a representative sample of individuals from the city of Bagé, Rio Grande do Sul (RS) was interviewed. The methodological design of the study was based on the EPICOID-RS survey.⁸

Bagé is a municipality located in the south of RS, more specifically in the Campanha region, and according to has about

110,000 inhabitants.⁹ The municipality's economy is based on agriculture and the service sector, and the Gross Domestic Product (GDP) per capita in 2019 was about R\$26,037.08. In 2010, Bagé had a Human Development Index (HDI) of 0.740, above the national average.⁹

Regarding the Health Care Network (RAS), the municipality has 20 basic health units (BHUs), in which 25 family health teams, four oral health teams, and about 130 community health agents (CHAs) are distributed.⁹

Bagé also has two mobile units, with services in hard-to-access locations. In addition, Bagé has three Family Health Support Centers (NASF) as reference for the primary care network teams. The population covered by primary care in the municipality is estimated to be 80.40%, with a reference of 3,000 people per team.⁹

For the sample calculation in the first round of the survey, 400 households were randomly selected to compose the initial sample of the study, based on the conglomerate sample selection. To define the clusters, we used the grid of census sectors that would be used by IBGE in the 2020 Demographic Census. According to this grid, the urban area of Bagé had 167 census sectors.

Of these, 40 sectors were randomly selected, excluding those special census sectors. The random selection took into account the socioeconomic level of each census sector, so that sectors of all socioeconomic levels are represented in the sample. After the sectors were defined, ten households were randomly selected in each sector. The draw was made based on the cumulative number of households within each census sector, divided by the number of stipulated households, obtaining the skip value. These 400 households were visited in the first epidemiological survey, and the survey was conducted in the period between late April and early May 2020.

Every two weeks the subsequent round of data collection was conducted. In each round, another 400 households located in the same census sectors as the first survey were randomly selected, totaling 1,600 households selected for the four rounds. In the household, a resident was randomly selected to answer the study questionnaire and be tested for COVID-19 with the WONFO SARS-CoV-2^{*} rapid total antibody test, which uses a lateral flow immunoassay to detect IgG/IgM antibodies against SARS-CoV-2 in human whole blood, serum, or plasma.

If the selected household was unoccupied or non-residential, the household to the right was selected for data collection. Interviewers were recruited by the Municipal Health Secretariat of Bagé, and the data collection team included CHAs and nursing technicians who worked in the municipality's primary care network.

Reflected as an advantage, since these health workers already knew the sectors and had the trust of the residents. All the interviewers participated in theoretical and practical training with a duration of eight hours, including the following topics: presentation of the project, introduction to the data collection instrument, and handling of the training questionnaire for rapid tests. Despite the active participation of the CHAs and nursing

technicians, there was no interference in the professional activities performed by these workers.

To assist in the application of the questionnaire and the completion of the answers by the interviewers, an instruction manual was developed, containing guidelines on how the questions should be answered.

Data collection was performed through a structured questionnaire, applied at the time of the visit, composed of mostly closed questions, covering personal and behavioral information and aspects related to the presence of comorbidities of the interviewee. Also evaluated at the time of the interview were the characteristics of the social distancing carried out. The questionnaire also addressed the food insecurity of the families visited, in order to assess access to food during the period of social withdrawal.

From the total number of participants in the study, only the female gender was included in this analysis, based on the gender variable. Subsequently, the sample was stratified according to the self-declared skin color of the interviewee, resulting in three groups – White, Black and Brown skin. The yellow skin color and the indigenous ethnicity were not included in this analysis, due to the minimum number of respondents, respectively 2 and 4, which would make the foreseen statistical analysis unfeasible.

The variables that described the interviewees were presented by average age, level of education, and stating that they had attended school. The analysis of the social context of the women included the average number of residents in the household, the sanitary conditions of the house (sanitary sewage, running water, electricity), and whether, during the social distance, there was concern about running out of food without having money to buy more.

Adherence to social withdrawal measures was questioned using a 5-point Likert scale, where 1 was very little, 2 a little, 3 more or less, 4 a lot, and 5 practically isolated from everyone. The participant was also asked about her current activity routine, for which she had to choose between the options 1 stay at home all the time, 2 go out only for essential things like buying food, 3 go out for shopping and stretching her legs, 4 go out every day for some activity, or 5 go out every day, all day, for work or another regular activity.

Regarding the behavior of the search for health care during social withdrawal, the variables considered were: presence of comorbidities (SAH, DM or other chronic disease); seeking health care in the last 15 days, reason for seeking health care (vaccination, previous health problem, scheduled return, flu symptoms, withdrawal of medications, others), and type of health care service sought.

Frequency analysis was performed using the chi-square test and the test for comparison of proportions in the IBM SPSS[®] statistical package. All the interviewees and guardians signed an informed consent form and assent, when applicable, prior to the test and performance of the questions by the interviewers. The study protocol was approved according to opinion CAEE 30869820.0.3001.5317.

RESULTS

There were 984 female respondents in the study. Table 1 shows that regardless of skin color, most participants had access to education; however, the white population had a higher proportion of college education, 174 (26.5%), compared to 14 (11.2%) and 7 (7.9%) of brown and black people, respectively.

As for the concern with finishing the food and the lack of resources to acquire it, it was observed that regarding the skin color the insecurity is greater among the black and brown women, differing from the white ones. The black respondents reported less access to sanitary sewage when compared to the self-declared white respondents, and there was no distinction regarding access to electricity and running water.

We identified that 395 (40.1%) of the interviewed population had a medical diagnosis of systemic arterial hypertension (SAH), 139 (14.2%) with diabetes mellitus (DM) and 130 (13.3%) with other chronic diseases (Table 2). There was no statistical difference between the groups according to skin color. Regarding the search for a health service in the two weeks prior to the interview, brown women differed from white women, having a greater search for health care. Primary care units represented the most prevalent health service in all skin color groups.

DISCUSSION

The analysis of the study showed that the color of skin can determine the health profile and consequently influence the

Table 1 – Description of the participants and analysis of the social context in which they are inserted, Bagé-RS, 2020.

| Variables | Skin color | | | | | | | | | p-value |
|--|-------------------|-----|------------------------|-----|--------------------------|-----|--------------------------|----|--------------------------|---------|
| | Total | | White (A) | | Grizzlies (B) | | Blacks (C) | | | |
| | n | % | n | % | n | % | n | % | | |
| Average age | 51 | | 52^{BC} | | 48 | | 46 | | | |
| Level of education | Elementary School | 340 | 39,0 | 238 | 36,2 | 72 | 57,6^{AC} | 30 | 33,7 | 0,000* |
| | High School | 336 | 38,6 | 245 | 37,3 | 39 | 31,2 | 52 | 58,4^{AB} | |
| | Higher Education | 195 | 22,4 | 174 | 26,5^{BC} | 14 | 11,2 | 7 | 7,9 | |
| Attended school | Yes | 912 | 95,7 | 695 | 96,4 | 124 | 94,7 | 93 | 92,1 | 0,110 |
| | No | 41 | 4,3 | 26 | 3,6 | 7 | 5,3 | 8 | 7,9 | |
| During the social detachment did you ever worry that you would run out of food without having money to buy more? | Yes | 104 | 10,6 | 47 | 6,3 | 35 | 25,7^A | 22 | 21,8^A | 0,000* |
| | No | 875 | 89,4 | 695 | 93,7^{BC} | 101 | 74,3 | 79 | 78,2 | |
| The average number of residents in the household | 3 | | 3 | | 3 | | 4 | | | |
| Piped water | Yes | 627 | 96,3 | 478 | 97,0 | 84 | 96,6 | 65 | 91,5 | 0,077 |
| | No | 24 | 3,7 | 15 | 3,0 | 3 | 3,4 | 6 | 8,5 | |
| Sanitary sewage | Yes | 606 | 93,8 | 465 | 94,7^C | 81 | 95,3 | 60 | 85,7 | 0,012* |
| | No | 40 | 6,2 | 26 | 5,3 | 4 | 4,7 | 10 | 14,3^A | |
| Electric light | Yes | 673 | 99,7 | 508 | 100 | 90 | 98,9 | 75 | 98,7 | 0,046 |
| | No | 2 | 0,3 | 0 | 0,0 | 1 | 1,1 | 1 | 1,3 | |

Legend = *p-value considered statistically significant when less than 0.05 as long as there are no 20% cells with values less than 5 occurrences. Bold proportions indicate statistically significant difference between proportions in the Z or T test, the superscript letter indicates the column of the proportion with which the value differs.

well-being of the population, since it could be verified that one in five black women were worried about lack of food in their homes. Moreover, one in four brown women alleged the same concern, while in the same period no white woman reported this type of concern.

Corroborating this finding, a study conducted with women belonging to a black community in the United States identified

the great social disparity that the pandemic brought to this racial group, since mortality rates were higher in this population and also the lack of access to determining factors for health, such as adequate food, was more pronounced.¹⁰

Also, the literature points out that black and mulatto women had the most negative impact on their work as a result of the pandemic of COVID-19.¹¹ Thus, it is evident that the racial

Table 2 – Description of the profile of women seeking access to the Unified Health System in Bagé, RS, Brazil, 2020

| Variables | | Skin color | | | | | | | | p-value |
|---|-------------------------|------------|------|-----------|-------------------------|---------------|-------------------------|------------------------|------|---------|
| | | Total | | White (A) | | Grizzlies (B) | | Blacks (C) | | |
| | | n | % | n | % | n | % | n | % | |
| Hypertension | Yes | 395 | 40,1 | 308 | 41,4 | 49 | 36,3 | 38 | 36,2 | 0,368 |
| | No | 589 | 59,9 | 436 | 58,6 | 86 | 63,7 | 67 | 63,8 | |
| Diabetes Mellitus | Yes | 139 | 14,2 | 104 | 14,0 | 20 | 14,7 | 15 | 14,3 | 0,978 |
| | No | 843 | 85,8 | 637 | 86,0 | 114 | 85,3 | 90 | 85,7 | |
| Other Chronic Disease | Yes | 130 | 13,3 | 90 | 12,2 | 25 | 18,7 | 15 | 14,3 | 0,124 |
| | No | 846 | 86,7 | 647 | 87,8 | 109 | 81,3 | 90 | 85,7 | |
| Visits to health services in the last 15 days | Yes | 240 | 24,7 | 163 | 22,2 | 47 | 34,8^A | 30 | 29,4 | 0,004* |
| | No | 732 | 75,3 | 572 | 77,8^B | 88 | 65,2 | 72 | 70,6 | |
| Type of health service sought | Basic Unit | 112 | 48,5 | 68 | 43,3 | 28 | 62,2 | 16 | 55,2 | 0,129 |
| | PA or UPA | 33 | 14,3 | 24 | 15,3 | 3 | 6,7 | 6 | 20,7 | |
| | Hospital or ER | 15 | 6,5 | 12 | 7,6 | 3 | 6,7 | 0 | 0,0 | |
| | Private | 43 | 18,6 | 35 | 22,3 | 6 | 13,3 | 2 | 6,9 | |
| | Other | 28 | 12,1 | 18 | 11,5 | 5 | 11,1 | 5 | 17,2 | |
| Reason that led to the health service | Vaccination | 42 | 18,5 | 25 | 16,2 | 12 | 26,7 | 5 | 17,9 | 0,938 |
| | Previous health problem | 42 | 18,5 | 30 | 19,5 | 7 | 15,6 | 5 | 17,9 | |
| | Scheduled return | 28 | 12,3 | 19 | 12,3 | 5 | 11,1 | 4 | 14,3 | |
| | Flu Symptoms | 10 | 4,4 | 8 | 5,2 | 1 | 2,2 | 1 | 3,6 | |
| | Other | 105 | 46,3 | 72 | 46,8 | 20 | 44,4 | 13 | 46,4 | |
| Adherence to Social distancing measures | | 4,0 | | 4,0 | | 4,0 | | 4,0 | | |
| Activity Routine | | 2,0 | | 2,0 | | 2,0 | | 3,0^B | | |

Legend = *p-value considered statistically significant when less than 0.05 as long as there are no 20% cells with values less than 5 occurrences. Bold proportions indicate statistically significant difference between proportions in the Z or T test, the superscript letter indicates the column of the proportion with which the value differs.

condition negatively impacts the health of these women, and furthermore, this reinforces the problematic regarding the racial inequality existing in Brazil, which was made clear during the pandemic caused by COVID-19.

The national survey by household sample COVID-19, reinforces the findings of this study, in which it found an increase of unemployed people in Brazil, in June 2020, an increase of 16.6% compared to May 2020, totaling 11.8 million unemployed Brazilians in the country in that period of study.¹² In addition to fewer opportunities and economic risk, the black population also has health vulnerability, the 14% prevalence of black women living in households without access to sanitary sewage in contrast to whites.

According to the Synthesis of Social Indicators (SIS) of the IBGE, while 72.1% of households where the majority of white people live have simultaneous access to water, sewage, and garbage collection services, this rate drops to 54.5% when the majority of residents are black or brown-skinned, which results from the association of housing and poverty indicators.¹³

It is noteworthy that the prevention guidelines against COVID-19 involve basic hygiene measures, such as proper hand washing, cleaning and disinfecting frequently touched objects and surfaces, keeping distance, if coughing or sneezing, covering the nose and mouth with a flexed elbow or tissue, the use of alcohol gel and subsequent vaccination.¹⁴ However, these measures become a challenge for these women in the municipality where the study took place, which did not have means of basic sanitation. Moreover, the black population has less access to information regarding the clinical manifestations and forms of infection of COVID-19 when compared to white people, which directly impacts the low adoption of hygiene measures and social isolation.¹⁵

Besides risk habits, the difficulties of access of black women to health needs are also evidenced by the literature. As for the demand for services offered by the SUS, brown and black women highlighted using the SUS with higher prevalence compared to white women, of whom one in five sought the private system. However, studies have been showing that despite black women being the ones who use health services the most, they still encounter numerous barriers when seeking the service, thus presenting higher probabilities of foreseen infection than white men and white women.¹⁶

Moreover, the black population has the least access to consultations and exams, a population completely dependent on the SUS that suffers with the pandemic from the disruption in the provision of services with follow-up, consultations, and exams, which were suspended for not being considered emergent.^{17,18}

The reduction in access implies the prevalence of chronic diseases, such as SAH and DM, which are multifactorial. In general, such diseases present a profile related to skin color, level of education, and inadequate diet, similar to the profile of black women in the study. Although there was no distinction between skin color and the chronic diseases analyzed in this research, NCDs more often affect lower-income populations

because they have less access to health services and practices to promote health and prevent diseases.^{19,20}

The black population is more prevalently affected in different countries by basic diseases such as hypertension, diabetes, chronic kidney disease, cerebrovascular and cardiovascular diseases, which would result in a greater potential for the development of severe cases of COVID-19.¹⁵ These findings are reinforced by other findings that showed that black people and communities with low purchasing power have worse outcomes of COVID-19 when compared to white people, the study conducted by the Center for Operations and Health Intelligence at PUC-Rio pointed out that of the total number of notifications for Covid-19 with outcome of deaths was 38% for the white population compared to 55% among black and brown people.²¹

The study was limited by the criterion of self-declaration of skin color, due to social and cultural reasons rooted in a slaveholding country such as Brazil, in which part of the population finds it difficult to declare itself as a minority. It is considered that the state of Rio Grande do Sul, as well as other regions of the country, has specific population and cultural characteristics; therefore, the results should be used with caution in the joint analysis of data from other sociocultural contexts.

CONCLUSION

Brown women sought health services more in the last two weeks of the study when compared to white women. Moreover, health care facilities were the most used. This shows that in the context studied the primary health care services are available and were used by a group that often encounters barriers in access to health care. However, it is necessary to evaluate the service, the demands, and the satisfaction in this population group.

Access to health care is one of the fundamental determinants of women's quality of life. Given what was exposed in this study it is possible to conclude that black women are targets of situations of greater vulnerability related to the difficulty in accessing information and health services, high prevalence of comorbidities, low purchasing power.

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